

at the sides: primaries below shining grey, the borders spotted with whitish; secondaries shining whitish; margin and a spot at the end of the cell black; two discal grey lines; fringe as above; body whitish. Expanse 1 inch.

Yokohama (*Jonas*).

80. *Miana segregata*, n. sp.

Primaries brown, crossed before the middle by a broad pale-edged darker band, its inner margin angulated and undulated, its outer margin nearly straight, but with a shallow sinus below the first median branch; a subquadrate costal sepia-brown white-edged spot near the apex, continued as an indistinct irregular band to the middle of the disk and enclosing a longitudinal black dash; a marginal series of black dots; an indistinct sigmoidal pale line near the base; fringe greyish, dusky below the middle; secondaries paler, with white costal margin, fringe partially white-tipped; body brown, whitish at the base of abdomen: primaries below greyish sericeous, internal area whitish, costal and external areas whity brown, speckled with darker brown; costa beyond the cell flecked with creamy-white; two indistinct parallel discal lines, the inner one angulated near the costa; secondaries whity brown, darker towards the apex, a dusky spot on discocellulars and an angulated discal line; body brown, pectus clothed with whitish hair. Expanse 1 inch 2 lines.

Yokohama (*Jonas*).

[To be continued.]

XI.—*Description of an apparently new Species of Hornbill from Cochin China, of the Genus Anthracoceros.* By D. G. ELLIOT, F.R.S.E. &c.

Anthracoceros fraterculus.

Male. Bill light yellow, with a black spot at base of mandible. A casque rises from base of culmen, extends backwards over the centre of the head, then curves forwards and returns to the culmen, at almost a right angle, at about one third its length from the tip of the maxilla. This is compressed laterally both at its anterior and posterior terminations, swelling outwards in the centre, but inclining to a keel-shape on top along its whole length. This casque is yellow like the bill, black on its anterior face, and with a broad black patch occupying nearly half the anterior portion, but which

does not reach to the maxilla. Naked skin around the eye and on sides of the throat flesh-colour. Head, neck, throat, upper part of breast, back, wing, and central tail-feathers black, with dark green reflections. Entire underparts, thighs, and tips of the secondaries and primaries pure white. Lateral tail-feathers have their apical third pure white, rest black, with green reflections. Tarsi and feet black. Total length from base of maxilla to end of central rectrices $23\frac{1}{2}$ inches; wing $10\frac{3}{4}$ inches; tail $11\frac{1}{4}$ inches; bill along gape $5\frac{1}{8}$ inches; casque on top $4\frac{7}{8}$ inches, height at base of maxilla $1\frac{1}{4}$ inch; height of bill and casque at base $2\frac{3}{4}$ inches; tarsus $1\frac{5}{8}$ inch.

Hab. Cochin China.

The present bird bears the same relationship to *A. malabaricus* as *A. convexus* does to *A. coronatus*, and apparently represents the *A. malabaricus* in Cochin China. It is much smaller than *A. malabaricus* in all its dimensions, has the casque much more compressed at the ends; and the black mark on the anterior portion does not reach the maxilla, but is confined to the casque as is seen in *A. coronatus*; whereas in *A. convexus* and *malabaricus* the black mark always extends onto the maxilla. The lateral rectrices; however, being only white for their apical third, indicates that the relationship of this species is with *A. malabaricus* and not with the others named. In order that the difference in size between the two species may be more clearly perceived, I add the measurements of *A. fraterculus*, as given above, and those of a fine adult male specimen, in the Paris Museum, of *A. malabaricus* for comparison:—

Anthracoceros fraterculus.

From base of maxilla to end of rectrices $23\frac{1}{2}$ inches.

Wing $10\frac{3}{4}$.

Tail $11\frac{1}{4}$.

Bill along gape $5\frac{1}{8}$.

Casque on top $4\frac{7}{8}$.

Height of casque at base of maxilla $1\frac{1}{4}$.

Height of bill and casque at base $2\frac{3}{4}$.

Tarsus $1\frac{5}{8}$.

Anthracoceros malabaricus.

From base of maxilla to end of rectrices 26 inches.

Wing 13.

Tail 13.

Bill along gape $6\frac{1}{4}$.

Casque on top $7\frac{1}{4}$.

Height of casque at base of maxilla 2.

Height of bill and casque at base $3\frac{3}{4}$.

Tarsus 2.

The type was brought from Cochin China, and is now in the Paris Museum; and for the opportunity of describing it I am indebted to Prof. A. Milne-Edwards, who in the most liberal manner does every thing in his power to facilitate investigations in the magnificent collections under his charge.

It would appear, therefore, that there are four species of Hornbills belonging to the genus *Anthracoceros*, differing from

each other both in the shape and markings of their casques, and also in the distribution of the colours of the plumage. They can be distinguished as follows:—

Key to the Species.

- A. Median pair of rectrices black, with green reflections.
- a'. Lateral rectrices pure white.
- a". Size large; black mark on casque never reaching the maxilla. 1. *A. coronatus*.
- b". Size small; black mark on casque extending onto the maxilla 2. *A. convexus*.
- b'. Lateral rectrices with their apical third white.
- a". Size large; black mark on casque reaching onto the maxilla. 3. *A. malabaricus*.
- b". Size small; black mark on casque not reaching the maxilla. 4. *A. fraterculus*.
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XII.—*On the Solitaire* (*Didus solitarius*, *Gm.*;¹ *Pezophaps solitaria*, *Strkl.*). By Prof. R. OWEN, C.B., F.R.S., &c.

[Plates VII. & VIII.]

BONES of this extinct bird collected in the island of Rodriguez during the "Transit-of-Venus" expedition, and now in the British Museum, have supplied materials for the articulation of the entire skeleton, and the subjects of the following notes.

In the skeleton of both male (Pl. VII. fig. 1) and female *Pezophaps*, the number of cervical vertebræ is 12, that of the dorsal 6, a 7th free-rib-bearing vertebra being made "sacral" by ankylosis with the rest of that coalesced group of bones.

So much of the vertebral formula thus accords with that of *Didunculus* *. As in that dove, also, the three middle dorsal vertebræ (third, fourth, and fifth) have coalesced, and their square truncate spines form a strong bony crest. Four pairs of ribs are connected, by ossified hæmapophyses, with the sternum; and this bone deviates mainly from the columbaeous type by the minor development of the keel, in relation to the atrophy of the chief muscles of flight.

Sixteen coalesced vertebræ constitute the sacrum of *Pezophaps* as of *Didus*; and seven free vertebræ beyond the pelvis support the tail-feathers. Thus the vertebral formula of *Pezophaps* is:—

C. 12, D. 6, S. 16, Cd. 7, = 41.

* See the figure of the skeleton of the didiform species of the Samoan Isles in my 'Memoir on the Dodo,' 4to, 1866, pl. iii. fig. 2.